

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of Species N, Figure 15 in the reply filed on 05/27/2011 is acknowledged. The traversal is on the ground(s) that application should be restricted into only three distinct species. This is not found persuasive because each of the species submitted by the examiner has different structure and one reference applied to one species would not apply to other thus it requires further searches in different field.

The requirement is still deemed proper and is therefore made FINAL.

Information Disclosure Statement

The information disclosure statements (IDS) were submitted on 02/06/2006. Accordingly, the examiner has considered the information disclosure statement, see attached 1449.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 95, 100-103 and 105 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 95, in line 13, "wherein the pedal travel simulator (2) is enabled and disabled a pneumatically operable device" is not clear. Besides the grammar error it is not clear what the applicant is referring to as the pneumatically operable device.

Regarding claim 100, the claim language is not clear where the "one or more devices" are provided.

Regarding claim 101, in line 3 of the claim "friction forces are generated" is not clear.

Claim 101 recites the limitation "the actuating force" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Regarding claim 103, in line 3 of the claim "so configured" is not clear.

Regarding claim 105, the word "means" is preceded by the word(s) "the means for" in an attempt to use a "means" clause to recite a claim element as a means for performing a specified function. However, since no function is specified by the word(s) preceding "means," it is impossible to determine the equivalents of the element, as required by 35 U.S.C. 112, sixth paragraph. See *Ex parte Klumb*, 159 USPQ 694 (Bd. App. 1967).

Double Patenting

Claims 95 and 103 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 16 of copending Application No. 20080217122 A1. Although the conflicting claims are not

identical, they are not patentably distinct from each other because referring to identical simulator, wherein the present application only added a spring.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claim 95 is rejected under 35 U.S.C. 102(a) as being anticipated by Hayn et al. (WO 2004/005095).

Regarding **claim 95**, Hayn discloses a brake actuating unit (fig. 1) comprising:
a brake booster (6) operable both by a brake pedal (1) and by an electronic control unit (4), and a device (5) is provided to decouple a force-transmitting connection between the brake pedal and the brake booster in the brake by wire operating mode;
a master brake cylinder (11);
a device (3) to detect a deceleration request of a driver, and
a pedal travel simulator (2) which interacts with the brake pedal and due to which a resetting force acting on the brake pedal can be simulated in the brake by wire operating mode independently of an actuation of the brake booster, and which can be enabled in the brake by wire operating mode when the force-transmitting connection

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between the brake pedal and the brake booster is decoupled and can be disabled outside the brake by wire operating mode, wherein the pedal travel simulator is enabled and disabled a pneumatically operable device ([0051, 0053-0054 and 0063]).

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 95 is rejected under 35 U.S.C. 102(b) as being anticipated by Klein (US 4,659,153).

Regarding **claim 95**, Hayn discloses a brake actuating unit (fig. 1) comprising:
a brake booster (6) operable both by a brake pedal (1) and by an electronic control unit (4), and a device (5) is provided to decouple a force-transmitting connection between the brake pedal and the brake booster in the brake by wire operating mode;
a master brake cylinder (11);
a device (3) to detect a deceleration request of a driver, and
a pedal travel simulator (2) which interacts with the brake pedal and due to which a resetting force acting on the brake pedal can be simulated in the brake by wire operating mode independently of an actuation of the brake booster, and which can be enabled in the brake by wire operating mode when the force-transmitting connection between the brake pedal and the brake booster is decoupled and can be disabled outside the brake by wire operating mode, wherein the pedal travel simulator is enabled and disabled a pneumatically operable device ([0051, 0053-0054 and 0063]).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained through the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 100-102 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayn et al. (WO 2004/005095) or Klein (US 4,659,153) in view of Belart (US 3,978,669).

Regarding **claims 100-102**, each of Hayn and Klein discloses all claimed limitations as set forth above but fails to disclose inner component of the simulator including one or more devices to produce a hysteresis so that friction forces via friction surface are generated in addition to the force of the simulator spring which counteract the actuating force acting on the brake pedal. However, Belart discloses simulator including one or more devices (fig. 1) to produce a hysteresis so that friction forces via friction surface (where components 2 and 7 provide friction forces via the surface of the

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housing) are generated in addition to the force of the simulator spring (46) which counteract the actuating force acting on the brake pedal. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the simulator of either Hayn or Klein with friction surfaces and spring as taught by Belart is an engineering design choice as such arrangement will make brake system more efficient by the force acted on the simulator.

Allowable Subject Matter

Claims 103 and 105 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MAHBUBUR RASHID whose telephone number is (571)272-7218. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Siconolfi can be reached on (571) 272-7124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Bradley T King/
Primary Examiner, Art Unit 3657

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